

NOTES IN THE PROVINCES.

SOME very extensive alterations and restorations in Cranfield Church, Bedfordshire, are in contemplation. The plans that have been agreed upon comprise works that will occasion an outlay of 2,000l.—The late high tides have destroyed upwards of half a mile of the upper esplanade at Weston-super-Mare, also the wall erected near the library. These works were repaired in the early part of last summer, at a heavy expense. At Ringstead-Seymour, a few miles from the above locality, the sea wall for the length of half a mile was washed down.—A meeting took place a few days since at York of the donors and subscribers to the York Yeoman School. Lord Morpeth occupied the chair. It appears that a sum, 3,400l., is required for the purchase of a site and the erection of a building capable of containing fifty boarders. The sum in hand already amounts to 2,800l.—It is expected that the Hull Glass Company will commence manufacturing in six months' time; and they have announced that they will proceed first with German sheet or patent plate glass.—Considerable improvements at the Ferryboat Dock, at Hull, are in contemplation. The plans of Mr. J. B. Hurley are spoken highly of; the cost of carrying them into effect is estimated at 8,000l. The improvements consist in the projection of an open piled jetty, two hundred feet in length, from the very centre of Nelson-street. This will have two arms at the extremity, running east and west, extending nearly from the east pier to within a few yards of the short jetty opposite to the Vittoria Hotel. Commodious landing-places will be formed both on the southern and northern sides of this transverse jetty, where passengers can land at any state of the tide, and, without further impediment, walk ashore.—The inhabitants of Aberdeen are taking active steps towards the establishment of public baths. An extensive and convenient site has been selected, and the committee of management apparently enter upon their task with energy and judgment.

RAILWAY JOTTINGS.

THE following are the members proposed by Sir R. Peel to be appointed the Select Committee on Railways:—Lord G. Somerset, Sir G. Grey, Mr. Strutt, Mr. Labouchere, Mr. Estcourt, Mr. Greene, Mr. Ewart, Mr. Colquhoun, Mr. Hodgson, Mr. Pakington, Sir G. Clerk, Mr. F. Baring, the O'Connor Dub, Lord H. Vane, and Mr. Shaw.—The engineer of the Ipswich and Bury St. Edmund's line reports that "The earthwork removed to embankment up to this time is 350,000 cubic yards; single fencing set up, 30,000 lineal yards; and permanent road laid, 10,000 lineal yards. The requisite culverts, and bridges in masonry and timber are in hand, and many of them completed." The total force employed at the present time on this line is 947 workmen and 155 horses.—It is the intention of the South-Western Company to make a branch to Hampton Court. When it is considered that the number of annual visitors to the palace exceed 150,000, surprise must be felt that such an undertaking remains to be carried out.—The three-arched bridge across the Ayr, about half a mile below Hawford-bridge, on the Glasgow, Kilmarnock, and Ayr line has been commenced. The principal arch of the viaduct when completed will be 190 feet high—higher, it is said, than any similar structure in the kingdom.—A memorial has been addressed by the Liverpool merchants to the directors of the London and Birmingham and Grand Junction lines requesting them to run an express line daily between Liverpool and London, at six a.m., each way, so that an inhabitant of either place may visit the other and return the same day.—It is intended shortly to convey passengers from Edmonton to the adjoining station, in omnibuses without additional fares. Should the plan succeed, it will doubtless be adopted throughout the whole of the Eastern Counties line as well as on other lines, and also in the metropolis.—The Central Railway station at Leeds will be confined within the limits of the Coloured Cloth Hall and the Infirmary, with their grounds extending into King-street and York-place with the gardens in front of the latter. The estimate for the purchases and erection is

250,000l.—Messrs. Craven and Sons, the contractors for the Lincoln, Newark, and Nottingham line, are making rapid progress and speak with confidence of their being able to complete their contract by the 1st of July.—The Atmospheric Railway of St. Germain will be opened in May next. The double bridge over the Seine and the great viaduct of 20 arches, raised to the height of 60 feet are entirely finished. The company was compelled to obtain the necessary tubes from England.

IMPORTANCE OF CONSTRUCTIVE SCIENCE.

DEFECTIVE ROOF.

SIR,—In a late number of your valuable journal, allusion is justly made to the decline in the constructive arts, apparent amongst our operatives, and the consequent inconveniences experienced by architects in procuring men able to execute their designs. This is a fact much to be lamented, and calls for the adoption of some means whereby our artisans may be instructed in the principles of construction, and have that stimulus given to their energies by which alone the object sought is ever to be attained.

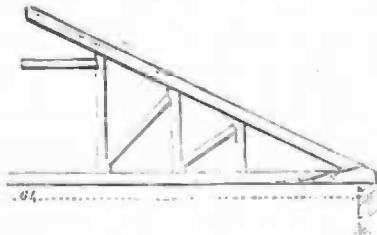
Whilst decline amongst our operatives is an evil to be regretted, and, as has been observed, demands a cure, there is another, and if possible, an evil of still greater moment, which cannot altogether have escaped your notice. I refer now, to the ignorance of constructive science which unhappily appears in the works of too many of the architects of the present day. If it be important that the workmen should understand the principles of construction, how much more essential is this knowledge to the architect, whose business it is to design and direct?

How many instances might be referred to where costly edifices have been erected, otherwise expressive of skill in design, but which, from defective construction in some important part, may essentially be said to be supplied with the means of their own destruction!

One instance, amongst the many; I cannot forbear to notice, evidencing the correctness of the preceding remarks. Passing lately through a town not 100 miles from Hull, my attention was arrested by the sounds of workmen engaged in a recently erected chapel.

Externally, the edifice presents a somewhat imposing appearance, having a Corinthian colonnade in front, surmounted by a pediment. Passing within, I observed an extensive scaffold erected, and an attempt making to repair a roof of defective construction.

It is almost incredible that a roof 64 feet span, with queen posts and straining beam, should have been constructed without discharging braces,—and yet here we have an example. The annexed sketch of this roof shows in its details, I must say, almost a total ignorance of the principles of construction. The trusses are placed 16 feet apart.



The construction of this roof, as will be seen, brings a great weight upon the tie-beam, and, consequently, a considerable degree of deflexion therein, amounting to 14 inches. This deflexion has necessarily broken the ceiling to pieces.

The deficiency of the roof clearly manifested itself on the laying on of the covering, and the means resorted to as a remedy were equally inadequate with the roof itself. Wrought-iron straps were applied, as shown on the sketch, to the feet of the rafters (X), and these were connected by bolts to other straps, which extended to some length on the beam, and towards the lower edge. By this means it was intended to raise the tie-beam, and to keep it in its proper position.

It is to be regretted, that the repairs now

going on, though entrusted to other hands, seem likely to reflect no greater credit on the skill of the architect employed than belongs to his predecessor. The proposed remedy consists of the application of timber beams, placed transversely beneath the tie-beams, supported by iron columns 12 inches diameter, rising from the floor of the gallery.

At as small a cost the roof might have been taken down and reconstructed, or I have no doubt that the required additions to it might have been made without recourse to this; and how much preferable would the result have been to the perpetual inconvenience and deformity now introduced.

Should these remarks be deemed worthy a place in your Journal, and be the means of calling the attention of any of your readers to the necessity of a sounder and more practical education being given to architects, the object of the writer will be attained.

I am, Sir, yours, &c., AN ARCHITECT.
Bradford, Yorkshire.

GAS.

SIR,—I am glad to see by various letters, that an attempt at improvement in the manufacture of an illuminating gas, is at last beginning to attract public attention. That there is room for improvement is, I believe, generally acknowledged. I have, however, in vain looked for some information relative to the direct manufacture of a pure illuminating gas. "J. A. E." letters, in a former number, slightly points out the advantages of oil-gas. "J. A. E." may rest assured, that a proposition to manufacture gas from any other material than coal, would meet with the strongest opposition from existing coke and gas companies. There is, I believe, scarcely a consumer of gas but who complains of the high price, inefficiency of light, and impurity of the present gas. He complains, but no remedy is applied; and he cannot do without gas, for the use of it has become a necessity. Gas companies have certainly expended large capitals, and are obliged to keep up an expensive establishment; but why should the public pay for it, if a better gas from other materials than coal can be manufactured at a cheaper rate? Why manufacture an impure material, and afterwards, at an enormous expense, purify it? It is like a chemist mixing poison in his medicines, and then, by an expensive process, which the public must pay for, extracting it to render them consumable.

The gas companies state, that they cannot reduce their prices without loss: it therefore becomes necessary to adopt some means for manufacturing a cheaper gas.

There is one subject connected with gas which I think ought to be brought prominently before the public, viz. that every parish should establish their own gas works, and, instead of annually paying large sums into the pockets of gas companies, expend it either in the improvement of the parish, the extension of charity, or reduction of poor-rates.

Paddington, Jan. 8th.

OBSERVER.

In London, where the consumption of gas is very great, and the coke is sold at a good price, the charge for gas is 7s. per 1,000 cubic feet; and the engineers profess they cannot sell it with a profit at less.

In Plymouth, where the consumption of gas is small, the price of the same quantity of gas is only 4s. 6d.; and I find upon inquiry, that this has been caused by the formation of a new company, under the direction and management of Mr. Huchison, engineer of the London Gas Company.

May I ask how it is that this gentleman can consistently recommend the sale of gas, where the consumption is small, at 4s. 6d. per 1,000 cubic feet, and charge 7s. 6d. per 1,000 cubic feet where the consumption is so much larger?

T. A. H.

EXTENSIVE SALE OF BRICKS.—At a sale of bricks by Mr. Mumford, at Wandstead Park, Essex, on the 22nd ult., the property of the Earl of Mornington, one lot of 105,000 at 33s. per thousand; 240,000 at 31s.; 170,000 at 23s.; 150,000 at 31s. Smaller lots of 10,000 each, from 17s. to 31s. The purchasers to clear at their own expense.